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May 16, 1996

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, NW Room 222
Washington, DC 20554

Re: Comments--MM Docket No. 96-58

Dear Mr. Caton:

Enclosed herewith are 12 copies (original plus 11) of the comments prepared on behalf of the Association of Federal Communications Consulting Engineers (AFCCE) regarding MM Docket No. 96-58, In the Matter of Amendments of Parts 73 and 74 of the Commission's Rules to Permit Certain Minor Changes in Broadcast Facilities Without a Construction Permit.

If there should be any questions, please do not hesitate to contact the undersigned.

Sincerely,

Donald G. Everist

DGE:cc
Encl.

ASSOCIATION OF

FEDERAL COMMUNICATIONS CONSULTING ENGINEERS

WASHINGTON, D.C.

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Parts 73 and 74	)	
of the Commission's Rules to	)	MM Docket No. 96-58
Permit Certain Minor Changes in	)	
Broadcast Facilities Without a	)	
Construction Permit	)	

COMMENTS OF THE ASSOCIATION OF FEDERAL COMMUNICATIONS CONSULTING ENGINEERS ON NOTICE OF PROPOSED RULE MAKING

Introduction

The Association of Federal Communications Consulting Engineers (AFCCE) is an organization that includes members who are registered professional engineers engaged in the practice of consulting engineering or are communications company engineering executives. The AFCCE was organized in 1948 and has, for more than 47 years, been pleased and honored to share its professional experience and insight with the Federal Communications Commission (FCC).

AFCCE has reviewed the Notice of Proposed Rule Making ("NPRM") MM Docket No. 96-58, released March 22, 1996. AFCCE finds the proposed changes constructive and supports the concept of replacing a two-step FCC processing procedure with a single step while maintaining the technical fabric of the broadcast system and AFCCE respectfully offers the following comments.

Increases in Effective Radiated Power (ERP) for Non-Grandfathered and Non-Contour Protection FM Commercial Stations

AFCCE generally supports this revision in the FCC Rules so long as the FCC does not routinely encounter improperly redetermined effective radiated power levels.[1]

Similarly, requirements for a construction permit should be eliminated for routine reductions in power.

Program Test for FM Stations with Directional Antennas

AFCCE supports this proposed rule revision.

Replacing One FM or Television Directional Antenna with Another

AFCCE supports this proposed rule revision.

Deletion of Contour Protection Status for FM Commercial Stations

AFCCE supports this proposed rule revision.

Use of Formerly Licensed Main Facilities as Broadcast Auxiliary Facilities (AM, FM and Television)

AFCCE supports this proposed rule revision.

Changes to the Vertically Polarized ERP for FM and Television Stations

AFCCE supports the proposed rule revision with the exception of all non-commercial educational FM stations located within minimum distances listed in Table A of Section 73.525(a)(1) of the FCC Rules and Regulations. In addition, educational FM stations that are collocated with TV Channel 6 stations must not be permitted to automatically change antenna systems, since relative vertical section radiation patterns must have downward radiation nulls coinciding with the nulls of the affected TV Channel 6 station.

Main Studio Change

AFCCE is in general agreement, however, clarification is sought when an engineering showing such as Tech Note 101 is required in order to demonstrate that the contour extends the

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[1]For example, predicted a station not at maximum height seeks to increase its power over the maximum power permitted for the class in order to achieve a 1 mV/m contour to its maximum distance. Also, it is uncertain how stations increasing power would comply with FAA's EMI requirements. Further, it is uncertain how such stations will comply with FCC mandated maximum R.F. radiation levels, particularly at multiple-use sites.

requisite distance. Specifically, guidance is requested on what the FCC deems necessary when a technical showing is required.

Commercial Stations Changing to Non-Commercial Educational Status

AFCCE supports this proposed revision.

Additional Clarifications to 47 CFR Section 73.1620 and 73.1690

AFCCE suggests that an additional section be added: 73.1690(b)(8) Any changes in antenna system of any non-commercial educational FM station which is collocated with ATV Channel 6 station.

Continuation of Protection to AM Stations

AFCCE supports the continued protection to AM stations. However, there appears to be a divergence in FCC practice and policy requirements imposed on a tower owner in the broadcast service (AM, FM or TV) who proposes a tower near an AM non-directional and/or directional array from that of a common carrier operator (cellular and PCS) who proposes a tower near an AM non-directional and/or directional array. AFCCE requests clarification.

Clarification to Channel 6 Television-FM Educational Rules in 47 CFR, Section 73.525 and CFR, Section 73.5999

AFCCE supports this rule revision.

Requirement That FM Measured Directional Composite Pattern Fill 85% or More of FM Directional Composite Pattern

AFCCE agrees with the need to eliminate those composite patterns which result in contours in which the areas unrealistically correspond to the measured patterns. However, there are several other factors which the Commission should consider before it arrives at a general yardstick.

First, the Commission narrative suggests 85%[2] of the area which results in 92.2 percent of the RMS of the pattern. A 92.2 percent composite pattern RMS requirement is an actual practice and is less than 1 dB and is unduly restrictive. Second, the ability to produce a desired FM directional radiation pattern is a function of the environment of the FM antenna support

[2]The Commission narrative makes reference to the AM directional RMS provision. The application of similar criteria in FM is not comparable.

structure. The support structure environment typically varies from tower to tower. It is well known that as the tower members approach 1.2 to 3.0 meters the ability to produce the desired composite pattern is correspondingly more difficult. Also the tower members typically influence the vertical component to a greater degree than the horizontal component, thereby further reducing the ability to control the pattern to match a theoretical composite pattern. Third, over the years as antenna manufacturers have improved their measurement range techniques, differences can result in replicating the same pattern developed by the same manufacturer in prior years. These difficulties can result in an uncertainty in the ability to produce and reproduce a measured pattern. Fourth, with advent of ATV could increase pressure on tower space and could conceivably place more FM stations at risk to move and thereby increase the need for a directional pattern. Antenna manufacturers over the years indicate that the variability at these frequencies and the confidence level is on the order of plus or minus 2 to 4 dB. Therefore, before electing to impose this condition, the FCC should take into consideration these important design considerations.

Fee for Modification of License Applications

This is not a technical issue; therefore AFCCE has no comment.

Summary

AFCCE supports with several modifications the above changes in the FCC Rules and believes that the additional rule language will add to flexibility while it aids in the continued goal of maintaining the broadcast system.

Respectfully Submitted,

Carl T. Jones Jr. (DLE)
Carl T. Jones Jr.
President

Date: May 16, 1996